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Global Preparatory Meeting in Preparation of the Consultation on the Food-Processing Industry with Emphasis on Fruit and Vegetable Processing

Vienna, Austria, 2-5 May 1989

REPORT*

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PREFACE

The System of Consultations is an instrument through which UNIDO serves as a forum for developed and developing countries in their contacts and consultations directed towards the industrialization of developing countries. Consultations permit negotiations among interested parties at their request, at the same as or after the meetings. Participants of each member country include representatives of governments, industry, labour, consumer groups and others, as deemed appropriate by each government.

Benefits emerging from this activity include the identification of obstacles to industrial development in developing countries, monitoring trends in world industry in order to identify action-oriented measures for increasing the share of developing countries in world production; determination of new forms of international industrial co-operation in North-South and South-South relations.

Consultation on the Food-Processing Industry with Emphasis on Fruit and Vegetable Processing

In accordance with the decision of the Industrial Development Board in Octobe 1986 and the programme of work adopted, the Consultation on the Food-Processing Industry with Emphasis on Fruit and Vegetable Processing will be convened in Tbilisi, USSR, from 18-22 September 1989.

Preparatory activities carried out by UNIDO

In preparation for the Consultation, UNIDO has carried out studies analyzing the problems and constraints in this sector and organized two Regional Expert Meetings, one for the Asian and Pacific region which was held in Beijing from 22-24 November 1988; the other for the Africa region in Tunis from 28-30 March 1989 and a Global Preparatory Meeting which took place in Vienna from 2-5 May 1989.

I. ORGANIZATION OF THE MEETING

1. The Global Preparatory Meeting in Preparation of the Consultation on the Food-Processing Industry with Emphasis on Fruit and Vegetable Processing was held at Vienna, Austria, from 2-5 May 1989. The meeting was attended by 22 participants from 20 countries. (See Annex I for list of participants).

Opening of the meeting

2. The meeting was addressed by the Deputy Director-General of the Department for Industrial Promotion, Consultations and Technology, who welcomed the participants and stressed the important role of the food processing industry in the economies of most developing countries and potential of the fruit and vegetable processing industry for the creation of opportunities to increase employment and for earning and saving foreign exchange.

3. He pointed out the importance of choice of appropriate policies and strategies in the development of the fruit and vegetable processing industry to ensure optimal benefits from the opportunities offered by domestic and export markets. He drew the attention of the participants to the fact that one of the main problems agriculture has to face today is the amount of waste, which can reach up to 80 per cent of production.

4. In this respect, the further development of the fruit and vegetable processing industry in the developing countries, urgently requires modern technology, planning and organizational skills in raw materials supply, storage, packaging and transportation.

5. The meeting was then addressed by the Director of the System of Consultations Division who welcomed the participants and gave an account of the work that UNIDO is carrying out within the framework of the System of Consultations to encourage contacts between the countries in order to promote the industrial and economic development.

6. He emphasized the importance of the integrated development of fruit and vegetable industries covering raw material supply, choice of technological process, financing, management and marketing. He also drew the attention of the participants to the fact that the creation of an effective and viable linkage between agriculture and industry with the aim of achieving a high degree of integration and interactions between these two sectors of the agroindustry and also close co-operation with other branches of industry (transport, energy, chemical industry, etc.) is of crucial need. Special efforts should be undertaken to improve the agricultural productivity, quality of raw materials and control, supply of spare parts and to mobilize technical and financial resources to rehabilitation, restructuration and creation of new productive facilities.

7. A representative from UNIDO gave an overall view of the fruit and vegetable processing industry in the world and referred to the development of the fruit and vegetable processing industry to foster industrialization through integrated agroindustries. The production of quality raw materials,

modern technology, types of processing, utilization of by-products, storage, methods of packaging, transportation problems of wastes, marketing, inspection and regulation should be analyzed and clarified. He expressed his confidence that co-ordinated efforts would inevitably help the interested parties to find a successful solution to existing problems and he hoped the meeting would determine the areas which are crucial for the future development of the fruit and vegetable industry.

II. SUMMARY OF DISCUSSIONS

8. Mr. Somchit Wanchai, Executive Manager, Thai Food Processor Association, was elected Chairperson of the Meeting. With the consensus of all participants the agenda was then adopted and is attached as Annex II.

9. A number of participants from different regions reiterated the importance of three factors in the development of the fruit and vegetable processing industry, namely,

a) continuous supply of suitable quality raw material to processing plants;

b) purchasing industry/equipment supplier contract, guaranteeing spare parts supply as well as provision of post-sale services;

c) development of local packaging material to avoid high costs of imported material.

10. Referring to the first of the above factors, namely the strengthening of the linkages between agriculture and processing industry some participants pointed out that often socio-political considerations influence the price of raw materials while, as far as their quality and variety are concerned, emphasis has to be given to research work.

11. It was also noted that in those developing countries with large fruit and vegetables production and availability, the consumer shows preference for the fresh market rather than for the processed one. Dietary habits also play a role. Modification of consumer taste, however, would require promotional efforts, involving additional costs.

12. In the search for solutions and alternatives some participants stressed the need to broaden North-South co-operation so as to cover transfer of technology in the area of quality/variety of raw materials, investment from industry in agricultural production, opportunity studies to identify the most suitable type of processing plants.

13. On the issue of markets the participants agreed that untapped local as well as regional/sub-regional market outlets should be identified and trade links with other developing countries strengthened.

14. Products which have a potential for expansion to cover a not yet saturated demand such as tropical fruits, should be jointly studied and specific development plans formulated with the assistance of concerned international organizations.

15. Participants also stressed that tariff and non-tariff barriers (percentage of sugar content, multilingual labelling, national standards) specifically relevant to fruits and vegetables deserve more attention and up-dated information should be provided to developing countries.

16. Some concern was expressed by a number of participants in relation to packaging of non-traditional products for which research work has not extensively been carried out yet. The development of appropriate local technology would open encouraging prospects for the future provided that the three main functions of packaging, namely, transport, conservation and consumer attraction, are met.

17. An important question discussed was also the difference of packaging for domestic market versus packaging for export. Participants agreed that the international standards for safe, long-lasting products are imperative also in the packaging intended for the internal market. An infrastructure of control and testing laboratories for packaging material, both imported or locally produced, should exist in developing countries as well.

18. Differences between packaging for local or export markets can only be based on economic considerations, transport means, social structure of consumer countries.

19. Several participants noted that in view of the situation reached in some markets, like Europe, towards products of mediterranean origin and, on the other hand, the increasing, yet stabilizing demand for tropical products, all market niches have to be explored and diversification of products introduced so as to meet the changing consumption patters prevailing in importing countries. The success experience of some Pacific countries in joint-ventures, supported by their national authorities and aimed at the processing of tropical products like ginger and papaya was mentioned.

20. The importance of developing, for new, diversified products, a standardization system, was stressed and in this respect the Codex Alimentarius FAO/WHO was indicated as the most suitable instrument.

21. Participants also agreed that innovative processing methods for by-products would also help solving problems related to waste utilization.

22. Besides, the participants pointed out that information on markets has not only to be available at regular, close time intervals but needs to be analyzed so that the trends indicated by the statistics are timely followed.

23. One major problem discussed at the meeting was the problem of under-utilized existing industrial capacity in developing countries where financial limitations call for economic and rational solutions.

24. The participants agreed that instead of orienting investment, private or public, towards the creation of new processing industries, a rehabilitation programme should be undertaken and a lesson should be drawn in respect to maintenance of industrial parts and availability of spare parts, both essential conditions for reaching and keeping the planned productivity levels.

25. In relation with investment a number of participants from developed and developing countries emphasized the need for extending the co-operation between producing and importing countries also in the field of investment. The same investment link would be desirable between the industry manufacturing the products and the agricultural producer.

26. The agricultural producer should agree with the processing industry upon the quality standard and variety of products required for processing since these differ from the quality standard and variety intended for the fresh market. Investment in research activities directed towards breeding and selecting of fruit and vegetable products for industry would represent a further, closer linkage between producer and user.

27. The importance of allied industry providing basic inputs to agro-industry and consequently to fruit and vegetable processing industry was recognized by all participants.

28. They also agreed that safe, biologically tested fertilizer and pesticides, water irrigation systems, transportation facilities, small-scale industries are required to assure the most suitable infrastructural environment for the development of this specific sector.

29. Different experiences in respect to government policies were highlighted by several participants, who agreed on the need for strategies supported by the government in areas such as credit to fruit and vegetable producers, investment in research, location of export markets, financing of working capital.

30. Considering that the regional preparatory meetings in preparation for the Consultation on the Food-Processing Industry with Emphasis on Fruit and Vegetable Processing were held in Beijing for the Asian region and Tunis, for the African region, the representatives of the Latin American countries attending the Global Preparatory Meeting in Preparation of the Consultation on the Food-Processing Industry with Emphasis on Fruit and vegetable Processing, namely, Peru, Guatemala, Cuba and Colombia, requested that consideration be given to convening a regional meeting in Latin America on basic products in the fruit and vegetable industry of the region.

The main objectives would be to:

-improve the quality of the products;

-improve the technology;

-enter into the regional and interregional markets.

31. It would be advantageous to hold this meeting prior to the Consultation taking place in September 1989. However, should this not be possible, it is suggested that the meeting be convened at the beginning of 1990.

CONCLUSIONS AND RECOMMENDATIONS

32. Based on its deliberations of the constraints, benefits and potentials of the fruit and vegetable processing industries in the developing countries, and having taken note of the conclusions and recommendations issued at the previously held Regional Expert Group Meetings (Beijing, 22-24 November 1988 and Tunis, 28-30 March 1989) the Global Preparatory Meeting in Preparation of the Consultation on the Food-Processing Industry with Emphasis on Fruit and Vegetable Processing agreed on the following:

33. The status of the development of the fruit and vegetable industry widely varies among countries and regions. There are, however, common concerns and objectives, namely,

a) to derive added value from raw material resources

b) to increase market shares in both domestic and export markets

c) to foster the process of industrialization through integrated development of agro-industries

d) to strengthen the linkages between upward and downward allied industries (engineering, chemical, energy, small scale industries)

e) to reduce losses and waste

34. To reach the above objectives the participants of the Meeting recommended:

-As a basic condition of productivity improvements in the fruit and vegetable processing plants, the linkages with raw material producers should be strengthened and supported through research work, quality control, regulation of contract and pricing systems in the recognition that the management of raw material is critical to the viability and efficiency of the industry;

-Government policies in respect of promotional and support measures are critical to the sustained development of the sector as an integrated component of the agro-industries sector as well as the industries providing it with its critical inputs. Such measures include incentives, technology transfer arrangements, data base on markets and exchange of information, quality guidelines and standards, tariffs and non-tariff barriers;

-Specific innovative incentives should be provided to primary producers to encourage them to ensure regular supply of raw material to the processing industry;

-Closer contacts should be established and maintained between technology, engineering and equipment suppliers and users in the entire range of contractual operations, i.e. from the selection of the equipment to the supply of spare parts and assurance of post-sale services;

-Local design and production of equipment and spare parts in developing countries should be fostered, through regional co-operation and through the setting up of small scale workshops at country level;

-Before investments are planned for the establishment of new industrial plants, a programme of rehabilitation and restructuring of existing industrial capacity should be undertaken for which assistance from international, financial and technical institutions could be sought;

-Mobilization of financial resources should be undertaken on a broad front particularly of equity and concessionary loans. Wider information on financing possibilities offered by financing institutions as well as donor countries in terms of a) joint ventures, b) different kinds of loans, c) barter agreements, d) donations, should be provided. In this connection the Industrial Investment Division of UNIDO will be requested to focus some of its activities and programmes specifically on the fruit and vegetables industry;

-To reach specific market outlets and secure market niches, diversification of production, including utilization of by-products and waste (peels, seeds) should be fostered. In this respect international standards and specifications for tropical fruit products, determining variety and quality requirements, should be formulated and agreed upon at the level of concerned international organizations (ISO, FAO, WHO) with the participation of interested countries (producers);

-Awareness of untapped potential in less known markets as well as of barriers in traditional markets has to be promoted through provision of global studies after the Consultation, documentation, statistics, analysis of data, analytical evaluation of the whole process of vegetable and fruit industry by relevant international organizations;

-To enter and expand markets, capacities and capabilities need to be developed in respect of research and development efforts aimed at developing new technologies, as well as managerial, organization and marketing skills which are critical factors for the long-term viability of the fruit and vegetable industries;

-Given the complexity and different requirements of export markets, in particular of the forthcoming 1993 European Common Market, it was agreed that there is a need to prepare the fruit and vegetable processing

industry in developing countries to fulfill these requirements resulting from the homogenization, within the EEC, of national legislations.

-Capacity for assessing, selecting and testing packaging material should also be given high priority in support programmes to the sector. The possibilities of creating packaging industries through regional co-operation should be explored;

-To solve key problems related to the fruit and vegetable industry, integrated programmes of technical assistance through mobilization of all local resources should be promoted and implemented rather than project-by-project assistance;

-Human resource development and training should be concentrated on management operations, and on the personnel dealing with technological processes and development programmes. In this area it was recommended that operational manuals related to training and technological processes should be worked out and utilized at all levels covering specific elements of production;

-Follow-up activities in terms of studies, technical assistance projects investment promotion and transfer of technology should always take into consideration the regional aspects relating to similarities in infrastructure and climate, level of integration, harmonization of national legislation, existing regional research and development training institutions, regional/sub-regional market requirements, promotion of regional co-operation and trade.

35. It was agreed that the Consultation Meeting should deal with the following main issues:

1) Basic requirements for long-term viability of fruit and vegetables industry

   a) National strategies and policies: integrated development objectives and instruments (government promotional and support measures: agricultural credit, fiscal, infrastructure research and development and regulatory);

   b) Rational integration between agriculture and industry (contracts producer/buyer, supply of raw materials in terms of quantity and quality, waste utilization, by-products);

   c) Efficiency, productivity (quality assurance, equipment, technology, packaging material and machinery, transport, rehabilitation, small scale industries, maintenance and repair);

   d) Manpower training at all levels, management and organizational skills;

   e) Markets (domestic, export, international standards, need for diversification, tariff/non-tariffs barriers, market promotion, market information/intelligence);

2) International co-operation

a) Role of international organizations (technical assistance, analysis of market information/intelligence, human resources development, support to research work);

b) Financing (joint venture, investment, loans);

c) Technology (transfer of technology, know-how, packaging from local raw materials);

d) Equipment (supply, contracts, spare parts, post sale services, maintenance);

e) Market information accessibility, joint formulation of international agreements/regulations);

f) South-South co-operation (joint research work, regional institutions, development of trade relations within regions/sub-regions).

III. CLOSURE OF THE MEETING

36. At the closing session, the Chairperson thanked the experts for their excellent professional contributions, their efforts and enthusiastic and fruitful participation. He expressed his strong belief that the outcome and recommendations of the meeting would be extremely useful for the preparation of the Consultation on the Food-Processing Industry with Emphasis on Fruit and Vegetable Processing and contribute to fulfilling its objectives.

Annex I

LIST OF PARTICIPANTS

Belgium

Flory F. Fraipont, Administrateur-dèlèguè, Smits Engineering S.A., Rue Roosendaelst., 125, 1190 Bruxelles

China

ZONG Ru Jing (Ms.), Head, Postharvest Physiology Laboratory, Beijing Vegetable Research Center, P.O.Box 2443, Beijing, West Suburb 100081

Colombia

Mario Rodriguez Vargas, Representante Permanente Alterno, Misiòn Permanente de Colombia, Stadiongasse 6-8, 1010 Viena, Austria

Efraìn Almanza Hernàndez, Expert-Technician, Misiòn Permanente de Colombia, Stadiongasse 6-8, 1010 Viena, Austria

Cote d'Ivoire

Emmanuel Dolly, Directeur gènèral, Societè pour le developpement de la production des fruits et lègumes (SODEFEL), Immeuble Omais (Plateau) 01, B.P. 3032, Abidjan 01

Cuba

Teresa Tejo Ramos (Ms.), Directora, Uniòn Conservas y Vegetales, Ministerio Industria Alimentaciòn, Ave. 41, Habana

Denmark

Erik Kristensen, Export Co-ordinator, Danbrew Consult Ltd., Rahbeks Allè 21, DK-1801 Frederiksberg C

Egypt

Zenab Hashem Ahmed (Ms.), Director, Food Industry Development Centre, 1 Abd El-Hamid Bataway Str.,Kaha - Kaliopia

Fiji

George Chun Fung, Production Manager, Food Processing (Fiji) Ltd., P.O. Box 2302, Suva

France

Alain Jacotot, Chef du Bureau des fruits et lègumes, Direction de la production et des echanges du Ministère de l'agriculture, 3, rue Barbet de Jouy, 75700 Paris

Claude Cosson, Ingènieur horticole, Sociètè d'èconomie mixte d'amènagement et de gestion du marchè d'intèret national de Paris (SEMMARIS), 1, rue de la Tour, B.P. 316, 94152 Rungis, Cedex

Fanchic Babron, Ingènieur agronome, Sociètè SIASS, 50 Bld de Courcelles, 75017 Paris

Germany, Federal Republic of

Jacques Bourgeois, Area Manager, Fa. Heinrich Frings GmbH & Co.KG., Jonas Cahn-Strasse 9, D-5300 Bonn 1

Guatemala

Lucia Emilia Rivas Alvarado (Ms.), Jefe del Departamento de Gestiòn de Inversiones y Proyectos, Unidad Sectorial de Planificaciòn Agropecuaria y de Alimentaciòn, Ministerio de Agricultura, Ganaderia y Alimentaciòn, Ave. Reforma 8-60, Zona 9, Edif. Galerias Reforma, 3er Nivel, Guatemala, C.A. 01009

India

V.H. Potty, Chairman, Technology Application Division, Central Food Technological Research Institute (CFTRI), Cheluvamba Mansion, Mysore 570 013

Italy

Agrippina Alessandroni (Ms.), Experte responsable du Secteur de l'industrie alimentaire, Ministère des affaires ètrangères, Direction gènèrale pour la coopèration au dèveloppement, Uff. XVI, La Farnesina, Rome

Netherlands

Peter T. Voskuil, Department for Processing and Marketing of Agricultural Products, Ministry of Agriculture and Fisheries, P.O.Box 20401, 73 Bezuidenhoutseweg, The Hague 2500 EK

Nigeria

F.A.O. Osinowo, Chief Research Officer, Agro-Industries Division, Federal Institute of Industrial Research (FIIRO), Oshodi, PMB 21023, Ikeja, Lagos

Perù

Sonia Garcia Arias (Ms.), Director - Gerente, Industria Nacional de Conservas Alimenticias S.A. (INCALSA), Prolg. Gamarra No. 1141-La Victoria, P.O.Box 1742, Lima 13

Philippines

Francisco C. Chavez, Chief Investments Specialist, Food Processing Division, Board of Investments, Industry and Investments Building, 385 Gil J. Puyat Avenue, Makati, Metro Manila

Senegal

Mouhamadou Diop, Directeur général, Institut de technologie alimentaire (ITA), B.P. 2765, Route des Pères Maristes Hann, Dakar

Thailand

Wanchai Somchit, Executive Manager, Thai Food Processor Association, 888/114 Ploenchit Road, 11th floor, Mahatun Plaza, Bangkok 10500

Tunisia

Meftah Amara, Ingénieur principal, Direction générale de l'agro-alimentaire, Ministère de l'agriculture, 30, Rue Alain Savary, 1002 Tunis

Union of Soviet Socialist Republics

Leonid I. Ouchakov, First Secretary, Permanent Mission of the USSR, Erzherzog Karl-Strasse 182, 1220 Vienna, Austria

United Kingdom

Stephen Hill, Second Secretary, Permanent Mission of the United Kingdom, Jaurèsgasse 12, 1030 Vienna, Austria

Annex II

AGENDA

1. Opening of the meeting

2. Election of officers

3. Adoption of the agenda

4. Introduction by the Secretariat of the results of the regional expert group meetings and presentation of background papers to be discussed

5. Discussions of the above items

6. Continuation of discussions

7. Continuation of discussion on the situation of the fruits and vegetables processing industries in the regions

8. Discussion of the potential issues and their selection for the Consultation meeting to be held in Tbilisi, USSR, 18-22 September 1989

   (a) Assurance of proper quality of the processed fruits and vegetables and measures to improve their quality as condition for the further development of the sector;

   (b) Packaging problems, material and methods of packaging, their economy, factors influencing the selection of proper and economic packaging;

   (c) Market situation, promotion methods, market evaluation and analysis, co-operation to improve access to markets.

9. Continuation of discussions

10. Adoption of conclusions and recommendations of the meeting

11. Continuation of the meeting (if necessary)

Annex III

LIST OF DOCUMENTS

Background paper prepared by H.G.R. Reddy for EGM for the Asian and Pacific Region in preparation of the Consultation on the Food-Processing Industry with Emphasis on Fruit and Vegetable Processing	IPCT.77(SPEC.)
Report of the EGM for the Asian and Pacific Region in preparation for the Consultation on the Food-Processing Industry with Emphasis on Fruit and Vegetable Processing	IPCT.80(SPEC.)
The State of Fruit and Vegetable Processing Industries in Africa: The Case of Algeria, Egypt, Côte d'Ivoire and Nigeria prepared by Yohannes Habtu	ID/WG.483/1(SPEC.)
Investment considerations in the fruit and vegetable processing sector prepared by the UNIDO Secretariat	ID/WG.483/2(SPEC.)
Report of the EGM for Africa in preparation of the Consultation on the Food-Processing Industry with Emphasis on Fruit and Vegetable Processing	ID/WG.483/3(SPEC.)
The fruit and vegetable processing industries for the Latin American and Caribbean regions prepared by Waldemar Moreira-Dias	ID/WG.484/1(SPEC.)
Packing materials and technologies and some marketing issues for the fruit and vegetable processing industries prepared by Károly Lotz	ID/WG.484/2(SPEC.)
Transformation des lègumes et fruits tropicaux èlaborè par J. De Vos (TRACTEBEL Industrie, Belgique)	
Fruit and vegetable processing in China prepared by ZONG Ru Jing	
Expérience de la Côte d'Ivoire (note de synthése) par E. Dolly	

Procesamiento Industrial de Frutas y Vegetales en la Repùblica de Cuba por Teresa Tejo Ramos

Fruits and Vegetables Processing in Egypt by Zenab Hashem Ahmed

Fruits and Vegetable Processing in Fiji-Brief Background, Development and Constraints by George Chun Fung

Contribution de la France á la Rèunion d'experts pour l'Afrique prèparatoire á la Consultation sur l'industrie alimentaire et plus particuliérement sur la transformation des fruits et lègumes

Resumen sobre la Situaciòn de las Plantas Procesadoras de Frutas y Hortalizas en Guatemala por Lucia Emilia Rivas Alvarado

Horticulture Industry in India by V.H. Potty

Status of Fruit and Vegetable Processing Industry in Nigeria by F.A.O. Osinowo

Antecedentes sobre la Industria de Elaboraciòn de Frutas y Hortalizas en el Perù por Sonia Garcia Arias

Fruit and Vegetable Processing Industry in the Philippines by Francisco C. Chavez

Situation du Secteur des fruits et lègumes au Sènègal by Mouhamadou Diop

Status and situation of fruit and vegetable processing in Thailand by Wanchai Somchit

Thailand Fruit and Vegetable Processing Industry by CHATCHAI Boonyarat

Les industries de transformation des fruits et lègumes en Tunisie by Amara Meftah